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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,683	01/20/2004	Thomas E. Broome	1001.1720101	5270

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EXAMINER

SEVERSON, RYAN J

ART UNIT	PAPER NUMBER
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3731

MAIL DATE	DELIVERY MODE
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10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

MA

Office Action Summary	Application No. 10/762,683	Applicant(s) BROOME ET AL.	
	Examiner Ryan Severson	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09 August 2007 has been entered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 4-11, 22, and 25-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Vale et al. (2002/0058963).** Vale et al. (hereinafter Vale) reference discloses the invention substantially as claimed in figures 13-17.

3. For example, regarding claims 1, 22, and 33, Vale discloses an elongated tubular member (70) with a proximal segment, a distal segment (71), and an inner lumen (see figure 13). Vale also discloses a dilator tip (50) inserted into part of the distal segment (see figure 15). The dilator tip has an outer diameter greater than the inner diameter of the distal segment (see figure 13). By pulling the tip (50) proximally, the distal segment of the tubular member is expanded (compare distal segment 71 in figures 13 and 15).

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4. Regarding claims 4 and 25, the dilator tip has a generally circular cross section.

5. Regarding claims 5 and 22, the dilator tip has a proximal section (the surface perpendicular to the inner member 11 that initially contacts the distal segment 71), a distal section (the tapered surface of the tip) and an inner lumen (see figures 13 and 15) that passes there through.

6. Regarding claim 6, the proximal section fits tightly within the distal segment (see figure 15).

7. Regarding claims 7 and 26, the distal section of the tip is tapered toward its distal end (see figure 13).

8. Regarding claims 8, 9, 27, and 28, the tubular member can expand to encompass an intravascular filter (see figure 17).

9. Regarding claims 10 and 29, the device can be used over a guidewire (25, see figure 16).

10. Regarding claims 11 and 30, the elongated tubular member can be used in a single operator exchange operation (see paragraph 73).

11. Regarding claims 31 and 32, Vale discloses an embolic protection filter (2) disposed about an elongated wire (25, see figure 16), a retrieval device (70) with proximal and distal segments (71), and a dilator tip (50) that is capable of engaging a stop (the "hub" at the proximal end of the filter directly on the guidewire, see figure 15). The proximal section of the dilator tip (as described in paragraph 5) is of greater outer diameter than that of the inner diameter of the distal segment, thereby expanding the distal segment when the proximal section of the dilator tip passes there through.

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12. Regarding claim 33, the distal segment is formed of an elastic material, which allows it to expand to take in the filter and the dilator tip without permanent deformation.

13. Regarding claims 34-36, the dilator tip has an outer diameter greater than the inner diameter of the tubular member (see figure 15) and has a lumen extending there through.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 2 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vale et al. (2002/0058963) as applied to claims 1 and 22 above, and further in view of Nilsson (5,873,851).** Vale reference does not disclose the proximal segment of the tubular member varies in thickness along its length. Attention is drawn to Nilsson reference, which teaches the wall thickness of a tubular member can have varying wall thickness (see column 5, lines 9-19) to provide a more flexible and resilient central section to assist in navigation through tortuous lumens. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the wall thickness of the proximal segment of Vale reference along its length to provide a more flexible and resilient central section to assist in navigation through tortuous lumens.

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16. **Claims 3 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vale et al. (2002/0058963) as applied to claims 1 and 22 above, and further in view of Salahieh et al. (2004/0127936).** Vale reference does not disclose a braid in the distal segment. Attention is drawn to Salahieh et al. (hereinafter Salahieh) reference, which teaches a tubular member may have a braid in its distal end (see paragraph 18) to impart flexibility to the distal portion while maintaining axial stiffness. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the braid of Salahieh in the distal end of the tube of Vale to impart flexibility to the distal portion while maintaining axial stiffness.

17. **Claims 12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vale et al. (2002/0058963) in view of Salahieh et al. (2004/0127936).** Vale reference discloses an elongated tubular member (70) with a proximal segment, a distal segment (71), and an inner lumen (see figure 13). Vale also discloses a dilator tip (50) inserted into part of the distal segment (see figure 15). The dilator tip has an outer diameter greater than the inner diameter of the distal segment (see figure 13). By pulling the tip (50) proximally, the distal segment of the tubular member is expanded (compare distal segment 71 in figures 13 and 15). However, Vale reference does not disclose a braid in the distal segment. Attention is drawn to Salahieh et al. (hereinafter Salahieh) reference, which teaches a tubular member may have a braid in its distal end (see paragraph 18) to impart flexibility to the distal portion while maintaining axial stiffness. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the braid of

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Salahieh in the distal end of the tube of Vale to impart flexibility to the distal portion while maintaining axial stiffness.

18. Regarding claim 14, the dilator tip has a generally circular cross section.

19. Regarding claim 15, the dilator tip has a proximal section (the surface perpendicular to the inner member 11 that initially contacts the distal segment 71), a distal section (the tapered surface of the tip) and an inner lumen (see figures 13 and 15) that passes there through.

20. Regarding claim 16, the proximal section fits tightly within the distal segment (see figure 15).

21. Regarding claim 17, the distal section of the tip is tapered toward its distal end (see figure 13).

22. Regarding claims 18 and 19, the tubular member can expand to encompass an intravascular filter (see figure 17).

23. Regarding claim 20, the device can be used over a guidewire (25, see figure 16).

24. Regarding claim 21, the elongated tubular member can be used in a single operator exchange operation (see paragraph 73).

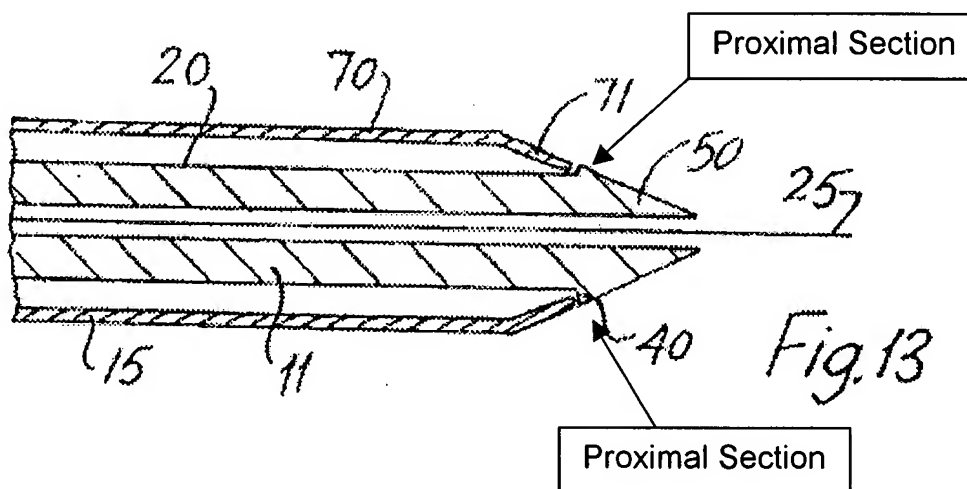
25. **Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vale et al. (2002/0058963) in view of Salahieh et al. (2004/0127936) as applied to claim 12 above, and further in view of Nilsson (5,873,851).** The combination of Vale and Salahieh references does not disclose the proximal segment of the tubular member varies in thickness along its length. Attention is drawn to Nilsson reference, which teaches the wall thickness of a tubular member can have varying wall thickness (see

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column 5, lines 9-19) to provide a more flexible and resilient central section to assist in navigation through tortuous lumens. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the wall thickness of the proximal segment of Vale in view of Salahieh reference along its length to provide a more flexible and resilient central section to assist in navigation through tortuous lumens.

Response to Arguments

26. Applicant's arguments filed 09 August 2007 have been fully considered but they are not persuasive. Applicant argues that Vale et al. do not disclose a dilator tip having a proximal section having an outer diameter greater than the inner diameter of the elongated tubular member. Examiner respectfully disagrees. Examiner points out in the annotated figure below that the dilator tip of Vale et al. certainly does have a proximal section and that proximal section is greater in diameter than the elongated tubular member. Therefore, the entirety of the rejection is maintained.



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Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Severson whose telephone number is (571) 272-3142. The examiner can normally be reached on Monday - Friday 9:00 - 5:30.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.S.

Ryan Severson
October 10, 2007


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
10/12/07